

## Before I Get Started

- New paradigm
- Currently not a perfected process
- Utility Coordination is being refined
- Constructive comments appreciated
- Opportunities for success welcome
- Presentation focused for designers



## BACK TO BASICS UTILITY COORDINATION PART 2: WORK PLANS



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PRESENTATION ORGANIZATION

- Introduction
- Background
- Work Plan Specifics
- Work Plan & Project Execution
- Questions



## Introduction

- Utility Team - Central Office
  - 1 each HE1 Senior Utility Engineer
    - Joe Gundersen, 317-234-5199
  - 3 each HE1 Utility Coordinator
    - Gail Lee, 317-232-5208
    - Aschalew Atya, 317-232-5160
  - 2 each HE2 Utility Coordinator
- Utility Team – District: 4/5 people



## Introduction

### Utility Team Duties

- Coordinate Utility Relocations
- Provide Guidance Utility Relocations
- Review / Approve Utility Relocations
  - Utility Coordination Consultant Work
  - Design Consultant Utility Coordination



## Background – New Paradigm

- Changing paradigm –
- ([www.dictionary.com](http://www.dictionary.com))
- *American Heritage Dictionary*
- **par·a·digm** (pār'ə-dīm', -dīm') n.
- A set of assumptions, concepts, values, and practices that constitutes a way of viewing reality for the community that shares them, especially in an intellectual discipline.



## Background – New Paradigm

- External – changing environment
  - Utilities more numerous
  - Utilities more technically sophisticated
  - Relocations more resource intensive
    - Acceleration of costs
    - Increased need for qualified labor



## Background – New Paradigm

- Solution
- Utility Relocation Task Force 7/1/04
  - Accountability
  - Communication
  - Coordination
  - Cooperation
- Team Work



## Background – New Paradigm

- Internal - Design
  - New project development process
  - New turn key design operations



## Background – New Paradigm

- Internal - Construction
  - Compensation for delays
    - Eliminated time
    - Substituted money
  - Increased cost of delays



## Background

- Internal – The New Paradigm
  - On time
    - Reduce delays due to utility relocations
  - On budget
    - Reduce costs from lengthy development
    - Reduce cost due to inflation
    - Reduce cost paid as compensation for delays
    - Reduce cost paid for change orders



## Background

- 105 IAC 13-1(a) Internal – Reasonable and Cost Effectively Manage Right-of-way of the State Highway System
  - Pro-active
  - Accommodate multi-use of right-of-way
  - Protect safety of motorists
  - Protect environment
  - Plan for the future (road or utilities)



## Work Plan Specifics

- Reference New IAC Rule
  - 105 IAC 13-3-3(c)
  - 105 IAC 13-3-3(d)
  - 105 IAC 13-3-3(e)
  - 105 IAC 13-3-3(f)
  - 105 IAC 13-3-3(h)



## Work Plan Specifics

- Designer Responsibilities:
  - Provide complete plans to utility
  - Decide when plans reasonably sufficient
  - Provide plans in manner useable by utility
  - Provide plans to utility contact or agent
  - Inform INDOT – Project Manager
  - Inform INDOT – Utility Oversight Agent



## Work Plan Specifics

- INDOT is developing a standardized format for the work plan
- Development team includes INDOT and Industry representatives
- Current format is ready to use but expect refinement over time





## Work Plan Specifics

- (Identifying Information)
  - Date of plan
  - INDOT Des. No.
  - Project Type
  - Project Location
  - Utility Name - Facility Type
  - Utility Contact



## Work Plan Specifics

- 105 IAC 13-3-3(c)(1) A narrative description of the facility relocation:
  - Location of existing facilities
  - Disposition of existing facilities
  - Location of proposed facilities



## Work Plan Specifics

- 105 IAC 13-3-3(c)(2) State whether facility relocation is dependant on
  - A.1 Work by another utility
  - A.2 Work by INDOT or Contractor
  - B.1 On acquisition of right-of-way
- With a description of that work



## Work Plan Specifics

- With a description of that work.
  - Right-of-way land acquisition complete
  - Stake proposed right-of-way
  - Existing obstructions to be removed
  - Another Utility to install equipment
  - Approval by INDOT to start relocation
  - INDOT to let the project as scheduled



## Work Plan Specifics

- 105 IAC 13-3-3(c)(3) State whether the utility is willing or not willing to allow the contractor to do the required work as part of the highway contract.
  - Water, sanitary; frequently yes
  - Others – availability of qualified labor
  - Resolves issue of reasonable cost



## Work Plan Specifics

- 105 IAC 13-3-3(c)(4) The
  - A. Earliest date when the utility could begin to implement the work plan.
  - B. Number of calendar days to complete the required work.



## Work Plan Specifics

- 105 IAC 13-3-3(c)(5) The expected lead time in calendar days to:
  - A. Obtain any required permits
  - B. Obtain materials
  - C. Schedule work crews
  - D. Obtain necessary additional right-of-way
  - (Lead time not necessarily sum of above)



## Work Plan Specifics

- 105 IAC 13-3-3(c)(6) A drawing of sufficient detail and scale to show the proposed location of facility relocation
- Details on this later



## Work Plan Specifics

- 105 IAC 13-3-3(d) For work the utility is entitled to compensation
  - Cost estimate
  - Credits for betterment
  - Documentation of easements and compensable land rights



## Work Plan Specifics

- 105 IAC 13-3-3(e) The Department shall review the work plan
  - 1.A Compatible with permit requirements
  - 1.B Compatible with project plans
  - 1.C Compatible with construction schedule
  - 1.D Compatible w/ other utility relocations



## Work Plan Specifics

- 105 IAC 13-3-3(e) The Department shall review the work plan
  - 2.A Reasonable relocation scheme
  - 2.B Reasonable cost for compensable work



## Work Plan Specifics

- Common Problems with drawings
  - Not on INDOT plans (shop drawings)
  - No stations, no offsets, no elevations
  - No detailed planning (generic depth)
  - No coordination with existing facilities
  - No coordination with proposed facilities
  - No coordination with other utilities



## Work Plan Specifics

- Review of drawings - Clarity
  - All facilities clearly marked
  - Old facilities to remain so note
  - Old facilities to abandon mark with "X"
  - New facilities; station, offset, elevation
  - New facilities; described type
  - New facilities; describe install method



## Work Plans Specifics

- Review of drawings – Build-able
  - Check method of installation
  - Check need for additional right-of-way
  - Check horizontal space
  - Check vertical space
  - Check with signal installations
  - Check with structure / bridge installations



## Work Plan Specifics

- Utility Accommodation Policy
  - Chapter 10-3.0 INDOT Design Manual
  - Ten State Standards
  - Abide by clear zone requirements
  - Limit LARW longitudinal runs, cross okay
  - Water lines encased for crossings
  - Sanitary force mains encased for crossings



## Work Plan Specifics

- Review of Drawings - Due Diligence
  - Conflict analysis – any crossings
    - Tabulation
    - Line (S-1-A)
    - Station (116+24)
    - Offset (26 ft R)
    - Type conflict (Water main 12 in. at 227.48)
    - Conflict resolution (top of line N.H.T. 226.00)





## Work Plan Specifics

- Cost estimate must be itemized
  - Reference 23 CFR 645
  - Labor (utility forces, contract forces)
  - Materials
  - Equipment
  - Engineering (preliminary, construction)
  - Burdens (overhead, surcharges)



## Work Plan Specifics

- Betterment must be identified
  - Anything more than replacement in kind
  - Exceptions
    - Improvements to current industry standards
    - Less expensive alternative



## Work Plan Specifics

- IAC 105 13-3-3(f) If the work plan is not compatible or reasonable the Department shall notify the utility by mail as soon as practicable.
  - Opportunity to refine work plan
  - Opportunity for further coordination
  - Opportunity to approve work plan



## Work Plan & Project Execution

- Copies of Work Plans
- Approvals
- Utility Coordination Complete Date
- Ready For Contracts Date
- Letting Date
- Acceptance of work



## Work Plan & Project Execution

### ■ Approvals

- Work plan signed by project manager
- Letter approve work plan
- Letter issue permit
- Letter notice to proceed



## Work Plan & Project Execution

### ■ Distribution

- 1 copy for utility
- 2 copy for district
- 1 copy for file



## Work Plan & Project Execution

- Utility Coordination Complete Date
  - Typ. 3 months before ready for contracts
  - Work plans submitted, review, approve
  - Utility Special Provisions submitted
    - Specification 107.26(a)
  - Utility Coordination Certificate submitted
    - [www.in.gov/dot/div/contract/design/dmforms/](http://www.in.gov/dot/div/contract/design/dmforms/)



## Work Plan & Project Execution

- Utility Special Provisions include
  - Name of utility
  - Name of utility agent
  - Telephone number of utility agent
  - State facilities are/are not present
  - State facilities are/are not to be relocated
  - State facilities are/are not reimbursable



## Work Plan & Project Execution

- Utility Special Provisions include
  - Location of existing facilities
  - Status of existing facilities
  - Location of new facilities
  - Special instructions
  - Pre-requisites for installation
  - Time requirements for installation



## Work Plan & Project Execution

- Utility Coordination Cert. Submitted
  - Part 1. Signature – due diligence
  - Part 2. Utility:
    - Reimbursable
    - Special provisions



## Work Plan & Project Execution

- Ready For Contracts Date
  - Typically 3 months before letting
  - Time needed to assemble contract
  - Submit to Contracts Section
    - Work plans
    - Special provisions
    - Utility Coordination Certificate



## Work Plan & Project Execution

- Acceptance of Work
  - District inspects work performed
  - Districts verifies work performed
  - Ensures work in accordance w/ work plan
  - Especially critical for compensable work



QUESTIONS?

